

## ILLUSTRATIONS.

<b>HERRING FISHERIES OF ENGLAND, SCOTLAND, AND HOLLAND:</b>	
Plate 1. Views of the herring industry of Yarmouth, England .....	1
2. Herring vessels and herring-packing establishments at Vlaardingen, Holland.....	16
<b>JAPANESE OYSTER CULTURE:</b>	
Plate 3. Oyster park at Tanna. General view showing bamboo collectors arranged in parallel lines .....	24
4. Oyster park near Nihojima. Typical living ground, or ike-ba, with hedge of shibi .....	28
5. Oyster park near Nihojima. General view showing newly arranged toyō .....	32
6. Bamboo oyster collectors, or shibi, after having been in use about one month, A; six months, B; eighteen months, C. Detached oysters shown at D.....	36
7. Map of the oyster and seaweed concessions in one of the estuaries of Nihojima to show how completely the cultural area is developed.....	38
<b>HABITS AND CULTURE OF THE BLACK BASS:</b>	
Plate 8. Black bass pond, fry retainer, and bass bed.....	40
<b>HEARING AND ALLIED SENSES IN FISHES:</b>	
Plate 9. (1) Side view of aquarium, showing sounding apparatus at right-hand end and suspended glass cage in which the fish were confined. (2) End view of aquarium showing sounding apparatus. (3) Dorsal view of brain of <i>Fundulus heteroclitus</i> , dissected to show positions of the roots of the fifth and seventh nerves (V), the roots of ninth and tenth nerves (X), and the internal ear as indicated by its otolith. (4) Dorsal view of head of <i>Fundulus heteroclitus</i> , to show region where the following nerves were cut: The fifth and seventh (V), the eighth (VIII), and the lateral-line nerve (X). (5) Side view of <i>Fundulus heteroclitus</i> , showing the region where the lateral-line nerve was cut (X)....	48
<b>NATURAL HISTORY OF THE QUINNAT SALMON:</b>	
Plate 10. (1) Lower McCloud River Falls, which prevent the ascent of salmon. (2) Sacramento River at Duns-muir. (3) Pit River Falls .....	67
11. (1) Sacramento River near Sims, "Pool B," referred to on page 102. (2) Sacramento River in the vicinity of Princeton.....	72
12. Diagram showing number and size of young salmon taken at Walnut Grove, 1899.....	94
13. (1) Adult and grilse forms of male salmon, with genital organs mature. (2) Lamprey scar on opercle of salmon. (3) Died from gill parasites, last of summer run, September, 1900.....	120
14. Diagram showing the passage of two runs of salmon from Vallejo to Sacramento, 1898 .....	124
15. (A) Female that had spawned all but about 500 ova, showing that the injuries are received while spawning the last few ova or after all have been spawned. (B) Male, apparently exhausted from long residence in fresh water, but not from being on spawning beds; typical condition of late summer-run males, Battle Creek, September 15, 1900. (C) Female, with ova but half developed, Battle Creek, September 15, 1900; died from long residence in fresh water. (D, E) Two males, grilse and adult, showing extreme cases of fungous growth, October 22, 1900.....	138
16. Tails of female salmon from spawning beds. (A, B) Tails of spawned-out salmon. (C) Tail of branded specimen No. 91, the tail being perfect eight days before photograph was taken. (D) Tail of salmon with about 500 ova yet remaining .....	140
17. Sacramento River between Redding and Tehama. Spawning beds of fall salmon indicated by clusters of dots .....	142
18. Chart of Sacramento River. Observation stations indicated thus, O .....	142
<b>FRESH WATER FISHES OF WESTERN CUBA:</b>	
19. (1) San Juan River, looking upstream from the first bend above the United Habana Railroad bridge. (2) San Juan River from above the United Habana Railroad bridge.....	218
20. (1) Rio San Diego at Paso Real, looking upstream from below Western Railroad bridge. (2) Rio del Pinar, looking upstream from bridge .....	216
21. (1) <i>Stygicola dentatus</i> (Poey). (2) <i>Lucifuga subterraneus</i> Poey. (2) <i>Lucifuga</i> , a blind fish containing unborn young with well-developed eyes.....	236
<b>ROTATORIA OF THE UNITED STATES:</b>	
Plate I. (1-6) <i>Diurella tigris</i> Müller. (7-10) <i>Diurella tenuior</i> Gosse. (11-14) <i>Diurella weberi</i> , new species .....	352
II. (15-18) <i>Diurella insignis</i> Herrick. (19-23) <i>Diurella porcellus</i> Gosse. (24-26) <i>Diurella sulcata</i> Jennings..	352
III. (27-31) <i>Diurella stylata</i> Eyferth. (32-34) <i>Diurella brachyura</i> Gosse. (35, 36) <i>Diurella cavia</i> Gosse .....	352
IV. (37-39) <i>Diurella rousseleti</i> Voigt. (40-44) <i>Diurella dixon-nuttalli</i> , new species .....	352
V. (45-49) <i>Rattulus gracilis</i> Tessin. (50-52) <i>Rattulus scipio</i> Gosse. (53, 54) <i>Rattulus macerus</i> Gosse.....	352
VI. (55-58) <i>Rattulus multicerinus</i> Kellicott. (59-61) <i>Rattulus capucinus</i> Wierz & Zach .....	352
VII. (62-64) <i>Rattulus cylindricus</i> Imhof. (65, 66) <i>Rattulus latus</i> Jennings .....	352

## ILLUSTRATIONS

V

## ROTATORIA OF THE UNITED STATES—Continued.

	Facing page
Plate VIII. (67-72) <i>Rattulus longiseta</i> Schrank. (73-76) <i>Rattulus bicuspis</i> Pell .....	352
IX. (77-80) <i>Rattulus bicristatus</i> Gosse. (81-85) <i>Rattulus pusillus</i> Lauterborn.....	352
X. (86-91) <i>Rattulus mucosus</i> Stokes. (92-94) <i>Rattulus stylatus</i> Gosse.....	352
XI. (95-97) <i>Rattulus carinatus</i> Lamarck. (98, 99) <i>Rattulus lophotus</i> Gosse. (100, 101) <i>Rattulus ratus</i> Müller.....	352
XII. (102-107) <i>Rattulus elongatus</i> Gosse .....	352
XIII. (108-110) <i>Diurella intermedia</i> Stenroos. (111, 112) <i>Rattulus scipio</i> Gosse. (118) <i>Diurella sulcata</i> Jennings. (114, 115) <i>Diurella brachyura</i> Gosse. (116, 117) <i>Diurella weberi</i> , new species. (118, 119) <i>Diurella sulcata</i> Jennings .....	352
XIV. (120, 121) <i>Diurella sejunctipes</i> Gosse. (122) <i>Diurella helminthodes</i> Gosse. (123-126) <i>Diurella marina</i> Daday. (127) <i>Diurella collaris</i> Rousselet. (128) <i>Diurella brevidactyla</i> Daday. (129) <i>Rattulus curvatus</i> Levander. (130) <i>Rattulus brachydactylus</i> Glasscott. (131, 132) " <i>Rattulus lunaris</i> " Ehrenberg. (133) <i>Rattulus dubius</i> Lauterborn. (134) <i>Distemma setigerum</i> Ehrenberg.....	352
XV. (135) <i>Rattulus unidens</i> Stenroos. (136) <i>Rattulus cuspidatus</i> Stenroos. (137) <i>Rattulus roseus</i> Stenroos. (138) " <i>Rattulus cimolius</i> " Gosse. (139) " <i>Rattulus calyptus</i> " Gosse. (140-143) <i>Elosa worralii</i> Lord. (144) " <i>Cœlopus</i> (?) <i>minutus</i> " Gosse. (145) <i>Bothriocerca affinis</i> Eichwald. (146) <i>Bothriocerca longicauda</i> Daday.....	352

## PLANKTON ALGAE OF LAKE ERIE:

Plate I. (I) <i>Chlamydomonas gracilis</i> Snow. (II) <i>Chlamydomonas communis</i> Snow. (III) <i>Chlamydomonas globosa</i> Snow. (IV) <i>Scenedesmus bijugatus</i> var. <i>flexuosus</i> Lemm. (V) <i>Staurogenia apiculata</i> .....	394
II. (VI) <i>Fusula viridis</i> Snow. (VII) <i>Oocyctis borgelii</i> . (VIII) <i>Chodatella citriformis</i> Snow. (IX) <i>Pleurococcus regularis</i> Artari.....	394
III. (X) <i>Pleurococcus aquaticus</i> Snow. (XI) <i>Chlorococcum natans</i> Snow. (XII) <i>Botrydiopsis eriensis</i> Snow. (XIII) <i>Botrydiopsis oleacea</i> Snow.....	394
IV. (XIV) <i>Chlorosphaera laeustris</i> Snow. (XV) <i>Chlorosphaera parvula</i> Snow. (XVI) <i>Mesocarpus spec.</i> (XVII) <i>Cœlosphærium roseum</i> Snow. (XVIII) <i>Chroococcus purpureus</i> Snow .....	394

## A MORE COMPLETE DESCRIPTION OF BACTERIUM TRUTTAE:

Plate I. <i>Bacterium truttae</i> Marsh .....	411
II. <i>Bacterium truttae</i> Marsh. Pigment produced in agar cultures .....	415

## FISHES OF HAWAIIAN ISLANDS:

Plate I. (1) <i>Dasyatis hawaiiensis</i> Jenkins, new species. (2) <i>Dasyatis sciera</i> Jenkins, new species.....	420
II. <i>Gymnothorax thalassopterus</i> Jenkins, new species.....	426
III. <i>Cypsilurus atrisignis</i> Jenkins, new species .....	436
IV. <i>Decapterus canonooides</i> Jenkins, new species .....	442

## SHORE FISHES OF HAWAIIAN ISLANDS:

Plate I. (1) <i>Carcharias insularum</i> Snyder, new species. (2) <i>Carcharias nesiotes</i> Snyder, new species .....	538
II. (3) <i>Veterinio verrens</i> Snyder, new species. (4) <i>Sphagebranchus flavicaudus</i> Snyder, new species.....	538
III. (5) <i>Callechelys lutea</i> Snyder, new species. (6) <i>Aphthalimichthys hawaiiensis</i> Snyder, new species ..	538
IV. (7) <i>Gymnothorax nuttingi</i> Snyder, new species. (8) <i>Gymnothorax berndti</i> Snyder, new species .....	538
V. (9) <i>Gymnothorax mucifer</i> Snyder, new species. (10) <i>Gymnothorax xanthostomus</i> Snyder, new species .....	538
VI. (11) <i>Gymnothorax waialae</i> Snyder, new species. (12) <i>Uropterygius leucurus</i> Snyder, new species.....	538
VII. (13) <i>Exonautes gilberti</i> Snyder, new species .....	538
VIII. (14) <i>Carangus chelio</i> Snyder, new species. (15) <i>Carangooides ajax</i> Snyder, new species.....	538
IX. (16) <i>Collybus drachme</i> Snyder, new species. (17) <i>Apogon erythrinus</i> Snyder, new species.....	538
X. (18) <i>Cirrhilabrus jordani</i> Snyder, new species. (19) <i>Hemipteronotus jenkinsi</i> Snyder, new species ..	538
XI. (20) <i>Cheetodon corallicolus</i> Snyder, new species. (21) <i>Holacanthus fisheri</i> Snyder, new species ..	538
XII. (22) <i>Stephanolepis praeceps</i> Snyder, new species .....	538
XIII. (23) <i>Antennarius nebulosus</i> Snyder, new species. (24) <i>Antennarius duescus</i> Snyder, new species .....	538

## FISHES COLLECTED IN THE TORTUGAS:

Plate I. (1) <i>Ctenogobius tortugae</i> Jordan, new species. (2) <i>Gnatholepis thompsoni</i> Jordan, new species.....	544
II. (2) <i>Elacatinus oceanops</i> Jordan, new species. (3) <i>Eretcius kalisherae</i> Jordan, new species.....	544

## ECHINODERMS OF WOODS HOLE REGION:

Plate I. (1, 2) <i>Asterias forbesi</i> (Desor). (3, 4) <i>Asterias vulgaris</i> Verrill .....	552
2. (5-7) <i>Asterias tenera</i> Stimpson. (8, 9) <i>Asterias austera</i> Verrill .....	554
3. (10, 11) <i>Cribrella sanguinolenta</i> (O. F. Müller). (12, 18) <i>Solaster endeca</i> (Retzius) .....	556
4. (14, 15) <i>Asterias forbesi</i> (Desor). (16, 17) <i>Asterias vulgaris</i> Verrill. (18, 19) <i>Asterias austera</i> Verrill. (20, 21) <i>Asterias tenera</i> Stimpson. (22) <i>Cribrella sanguinolenta</i> (O. F. Müller). (23) <i>Solaster endeca</i> (Retzius) .....	556
5. (24-27) <i>Ophiopholis aculeata</i> (Linnaeus). (28-30) <i>Ophiura brevispinosa</i> Say .....	558
6. (31, 32) <i>Ophioglypha robusta</i> (Ayres). (33, 34) <i>Amphipholis squamata</i> (Delle Chiaje). (35, 36) <i>Gorgonocephalus agassizii</i> (Stimpson) .....	560
7. (37, 38) <i>Ophiura brevispinosa</i> Say. (39, 40) <i>Ophioglypha robusta</i> (Ayres). (41, 42) <i>Ophiopholis aculeata</i> (Linnaeus). (43, 44) <i>Amphipholis squamata</i> (Delle Chiaje). (45-47) <i>Gorgonocephalus agassizii</i> (Stimpson) .....	560
(48-52) <i>Arbacia punctulata</i> (Lamarck) .....	563
9. (53-57) <i>Strongylocentrotus drobachiensis</i> (O. F. Müller) .....	564
10. (58-62) <i>Echinarachnius parma</i> (Lamarck). (63, 64) <i>Mellita pentapora</i> (Gmelin) .....	564

ECHINODERMS OF WOODS HOLE REGION—Continued.	Facing page
Plate 11. (65, 66) <i>Cucumaria frondosa</i> (Gunnerus). (67) <i>Thyone briareus</i> (Lesueur). (68, 69) <i>Thyone unisemita</i> (Stimpson). (70) <i>Cucumaria pulcherrima</i> (Ayres). (71) <i>Thyone scabra</i> Verrill. (72) <i>Trochostoma oöliticum</i> (Pourtales). (73) <i>Caudina arenata</i> (Gould). (74) <i>Synapta inhaerens</i> (O. F. Müller). (75) <i>Synapta roseola</i> (Verrill) .....	566
12. (76-80) <i>Cucumaria frondosa</i> (Gunnerus). (81-85) <i>Cucumaria pulcherrima</i> (Ayres). (86-90) <i>Thyone unisemita</i> (Stimpson) .....	566
13. (91-94) <i>Thyone scabra</i> Verrill. (95-102) <i>Thyone briareus</i> (Lesueur). (103, 104) <i>Caudina arenata</i> (Gould). (105-108) <i>Trochostoma oöliticum</i> (Pourtales) .....	568
14. (109-112) <i>Synapta inhaerens</i> (O. F. Müller). (113-116) <i>Synapta roseola</i> (Verrill) .....	571
<b>JAPANESE FISHERS COLLECTED BY THE ALBATROSS:</b>	
Plate 1. (1) <i>Chlorophthalmus albatrossis</i> Jordan & Starks, new species. (2) <i>Chauliodus emmelas</i> Jordan & Starks, new species .....	630
2. (1, 2) <i>Neoscupelus alcocci</i> Jordan & Starks, new species. <i>Polyipnus stereope</i> Jordan & Starks, new species .....	630
3. (1, 2) <i>Peristedion amicus</i> Jordan & Starks, new species. (3) <i>Watasesi sivicolus</i> Jordan & Snyder.....	630
4. (1) <i>Melanobranchus antrodes</i> Jordan & Gilbert, new species. (2) <i>Nezumia condylura</i> Jordan & Gilbert, new species .....	630
5. (1) <i>Atheresthes evermanni</i> Jordan & Starks, new species. (2) <i>Alaeops plinthus</i> Jordan & Starks, new species .....	630
6. (1) <i>Dexistes rikuzenius</i> Jordan & Starks, new species. (2) <i>Araiias ariomimus</i> Jordan & Starks, new species .....	630
7. (1) <i>Veræqua achne</i> Jordan & Starks, new species. (2) <i>Microstomus kitaharae</i> Jordan & Starks, new species .....	630
8. (1) <i>Engyprosopon ijimae</i> Jordan & Starks, new species. (2) <i>Scaeops grandisquama</i> (Schlegel) .....	630
<b>TEXT CUTS.</b>	
<b>JAPANESE OYSTER CULTURE:</b>	
Map of region of oyster culture on north shore of inland sea near Hiroshima (Sea of Aki) .....	20
Fisherwoman opening oysters .....	21
Hand pick for making sockets in gravelly bottom .....	22
Bamboo collectors (shibi) forming boundary hedge .....	22
Arrangement of branched collectors .....	23
Diagrams of oyster farms .....	24, 25, 26, 29, 30, 34, 35
Oyster hook .....	27
Oyster rakes .....	27
Mitten used to hold oyster-bearing shibi while separating oysters .....	28
Basket for collecting and storing marketable oysters .....	28
Bamboo collectors as arranged in Kusatsu .....	31
Bamboo collectors as arranged in Kaida Bay .....	32
Ground plan of a mound toy of collectors .....	33
<b>NATURAL HISTORY OF THE QUINNAT SALMON:</b>	
Stomach, pyloric appendages and part of the intestine .....	126, 127, 128
Heads of salmon, showing changes in fresh water .....	130, 131
Genital organs of hermaphrodite salmon .....	132
Spawned-out female .....	138
<b>FISHES FROM NORTHEASTERN CALIFORNIA:</b>	
<i>Pantosteus lahontoni</i> Rutter, new species .....	148
<i>Agosia robusta</i> Rutter, new species .....	148
<b>FRESH-WATER FISHES OF WESTERN CUBA:</b>	
<i>Fundulus cubensis</i> Eigenmann, new species .....	223
<i>Glaridichthys falcatus</i> Eigenmann, new species .....	224
<i>Glaridichthys torralbasi</i> Eigenmann, new species .....	225
<i>Glaridichthys garmani</i> Eigenmann, new species .....	226
<i>Toxus riddlei</i> Eigenmann, new species .....	227
<i>Heterandria cubensis</i> Eigenmann, new species .....	229
<i>Atherina evermanni</i> Eigenmann, new species .....	229
<i>Eucinostomus meeki</i> Eigenmann, new species .....	229
<i>Heros tetracanthus torralbasi</i> Eigenmann, new subspecies .....	230
<i>Heros tetracanthus tetracanthus</i> Cuvier and Valenciennes .....	231
<i>Heros tetracanthus griseus</i> Eigenmann, new subspecies .....	232
<i>Heros tetracanthus latus</i> Eigenmann, new subspecies .....	233
<i>Heros tetracanthus cinctus</i> Eigenmann, new subspecies .....	234
<i>Heros nigricans</i> Eigenmann, new species .....	235

THE ORGAN AND SENSE OF TASTE IN FISHES:	Page.
Brain of yellow cat-fish .....	242
Section through skin of top of head of <i>Ameiurus melas</i> .....	248
Projection of cutaneous branches of communis root of facial nerve in <i>Ameiurus melas</i> .....	249
<b>ROTATORIA OF THE UNITED STATES:</b>	
Dorsal views of toes in <i>Rattulidae</i> .....	284, 285
Spiral path followed by <i>Diurella tigris</i> Müller .....	296
Diagram of a reaction to a stimulus in <i>Diurella tigris</i> Müller .....	297
<b>NOTES ON SOME FRESH-WATER FISHES FROM MAINE:</b>	
<i>Leuciscus carletoni</i> Kendall, new species .....	358
<i>Pimephales anuli</i> Kendall, new species .....	360
<i>Coregonus labradoricus</i> Richardson .....	364
<i>Coregonus quadrilateralis</i> .....	365
<i>Coregonus stanleyi</i> Kendall, new species .....	367
<b>DESCRIPTION OF A NEW SPECIES OF DARTER FROM TIPPECANOE LAKE:</b>	
<i>Hadropterus evermanni</i> Moenkhaus, new species .....	398
<b>REPORT ON COLLECTIONS OF FISHES MADE IN THE HAWAIIAN ISLANDS:</b>	
<i>Congrellus bowersi</i> Jenkins, new species .....	422
<i>Microdonophis macgregori</i> Jenkins, new species .....	423
<i>Muraena lamprta</i> Jenkins, new species .....	423
<i>Muraena kauila</i> Jenkins, new species .....	424
<i>Gymnothorax leucostictus</i> Jenkins, new species .....	425
<i>Gymnothorax gracilicauda</i> Jenkins, new species .....	426
<i>Gymnothorax leucacme</i> Jenkins, new species .....	427
<i>Gymnothorax ercodes</i> Jenkins, new species .....	428
<i>Echidna leihala</i> Jenkins, new species .....	429
<i>Echidna vincta</i> Jenkins, new species .....	430
<i>Echidna obscura</i> Jenkins, new species .....	430
<i>Echidna pealton</i> Jenkins, new species .....	431
<i>Myripristis sealei</i> Jenkins, new species .....	439
<i>Seriola sprana</i> Jenkins, new species .....	442
<i>Carangus hippoides</i> Jenkins, new species .....	443
<i>Carangus rhabdotus</i> Jenkins, new species .....	445
<i>Carangus politus</i> Jenkins, new species .....	446
<i>Fowleria brachygrammus</i> Jenkins, new species .....	448
<i>Apogon menesemus</i> Jenkins, new species .....	449
<i>Priacanthus meeki</i> Jenkins, new species .....	451
<i>Etelisicus marshi</i> Jenkins, new species .....	452
<i>Pseudupeneus porphyreus</i> Jenkins, new species .....	455
<i>Chromis elaphrus</i> Jenkins, new species .....	457
<i>Calotomus cyclurus</i> Jenkins, new species .....	466
<i>Calotomus snyderi</i> Jenkins, new species .....	467
<i>Scaridea zonarcha</i> Jenkins, new species .....	468
<i>Scaridea balia</i> Jenkins, new species .....	469
<i>Teuthis leucopareius</i> Jenkins, new species .....	476
<i>Teuthis guntheri</i> Jenkins, new species .....	478
<i>Acanthurus incipiens</i> Jenkins, new species .....	480
<i>Callicanthus metoposiphron</i> Jenkins, new species .....	482
<i>Tropidichthys oahuensis</i> Jenkins, new species .....	485
<i>Tropidichthys epilamprus</i> Jenkins, new species .....	486
<i>Lactoria galeodon</i> Jenkins, new species .....	488
<i>Diodon nudifrons</i> Jenkins, new species .....	488
<i>Cirrhitoides bimacula</i> Jenkins, new species .....	490
<i>Sebastopsis kelloggi</i> Jenkins, new species .....	493
<i>Sebastapistes corallicola</i> Jenkins, new species .....	494
<i>Sebastapistes coniorta</i> Jenkins, new species .....	496
<i>Sebastapistes galactacma</i> Jenkins, new species .....	497
<i>Dendrochirus chloreas</i> Jenkins, new species .....	498
<i>Eviota epiphanes</i> Jenkins, new species .....	501
<i>Chlamydes laticeps</i> Jenkins, new species .....	503
<i>Gobionellus lonchotus</i> Jenkins, new species .....	504
<i>Enypniass oligolepis</i> Jenkins, new species .....	504
<i>Tripterygion atriceps</i> Jenkins, new species .....	505
<i>Salarias cypho</i> Jenkins, new species .....	507
<i>Salarias saltans</i> Jenkins, new species .....	508
<i>Salarias rutilus</i> Jenkins, new species .....	509
<i>Aspidontus brunneolus</i> Jenkins, new species .....	510

VIII BULLETIN OF THE UNITED STATES FISH COMMISSION.

JAPANESE FISHES DREDGED BY ALBATROSS:	Page.
<i>Myxine garmani</i> Jordan & Snyder.....	577
<i>Centroscyllium ritteri</i> Jordan & Fowler.....	578
<i>Raja tengu</i> Jordan & Fowler .....	578
<i>Diaphus watasei</i> Jordan & Starks, new species .....	581
<i>Synaphobranchus jenkinsi</i> Jordan & Snyder .....	582
<i>Congrellus megastomus</i> (Günther) .....	582
<i>Sphagebrachnus moseri</i> Jordan & Snyder .....	582
<i>Macrorhamphosus sagittifer</i> Jordan & Starks.....	583
<i>Hippocampus sindonis</i> Jordan & Snyder .....	583
<i>Paratrachichthys prosthemius</i> Jordan & Fowler.....	584
<i>Zen itea</i> Jordan & Fowler.....	584
<i>Apogon lineatus</i> Schlegel .....	585
<i>Antigonia rubescens</i> (Günther) .....	586
<i>Thysanichthys crossotus</i> Jordan & Starks.....	587
<i>Lythrichthys eulabes</i> Jordan & Starks.....	588
<i>Scorpaena izensis</i> Jordan & Starks .....	589
<i>Ocosia vespa</i> Jordan & Starks.....	589
<i>Stenoglossus osensis</i> Jordan & Starks.....	590
<i>Schmidtiina misakiensis</i> Jordan & Starks .....	590
<i>Daruma sagamia</i> Jordán & Starks.....	590
<i>Ricuzenius pinetorum</i> Jordan & Starks .....	591
<i>Pseudoblennius totomius</i> Jordan & Starks.....	591
<i>Cottusculus schmidti</i> Jordan & Starks .....	592
<i>Cottunculus brephocephalus</i> Jordan & Starks .....	592
<i>Crystallias matsushima</i> Jordan & Snyder .....	592
<i>Peristedion orientale</i> Schlegel .....	598
<i>Lepidotrigla abyssalis</i> Jordan & Starks, new species .....	595
<i>Lepidotrigla japonica</i> (Bleeker) .....	596
<i>Suruga fundicola</i> Jordan & Snyder .....	597
<i>Chæturichthys scilius</i> Jordan & Snyder .....	597
<i>Trypauchen wakae</i> Jordan & Snyder.....	597
<i>Callionymus flagris</i> Jordan & Fowler.....	598
<i>Draconetta xenica</i> Jordan & Fowler.....	598
<i>Pteropssaron evolans</i> Jordan & Snyder .....	599
<i>Oscoparon verecundus</i> (Jordan & Snyder) .....	600
<i>Eulophias tanneri</i> Smith .....	600
<i>Lycenchelys pacificum</i> Jordan & Fowler .....	600
<i>Bothrocara zesta</i> Jordan & Fowler .....	601
<i>Porogadus guntheri</i> Jordan & Fowler .....	601
<i>Gadomus colletti</i> Jordan & Gilbert, new species.....	604
<i>Regania nipponica</i> Jordan & Gilbert .....	605
<i>Coryphaenoides awa</i> Jordan & Gilbert, new species .....	609
<i>Coryphaenoides garmani</i> Jordan & Gilbert, new species .....	610
<i>Coryphaenoides misakiensis</i> Jordan & Gilbert, new species .....	611
<i>Hymenocephalus striatissimus</i> Jordan & Gilbert, new species .....	613
<i>Hymenocephalus papyraceus</i> Jordan & Gilbert, new species .....	614
<i>Hymenocephalus lethophorus</i> Jordan & Gilbert, new species .....	615
<i>Cælorhynchus kishinouyei</i> Jordan & Snyder .....	618
<i>Cælorhynchus anatirostris</i> Jordan & Gilbert, new species .....	619
<i>Cleisthenes pinetorum</i> Jordan & Starks, new species .....	622
<i>Lophius litulon</i> (Jordan) .....	627
<i>Malthopsis tiarella</i> Jordan .....	628